

REMARKS/ARGUMENTS

The preceding amendments and following remarks are submitted in response to the final Office Action mailed December 2, 2005, setting a three-month shortened statutory period for response ending March 2, 2006. With this amendment, claims 23, 28, and 32 have been amended. Claims 1-13 and 15-34 remain pending in the Application. Reconsideration, examination and allowance of all pending claims are respectfully requested.

35 U.S.C. § 112, ¶ 1 Rejections

In paragraph 6 of the Office Action, the Examiner rejected claims 23 and 32 under 35 U.S.C. § 112, first paragraph, stating that these claims fail to comply with the enablement requirement. In particular, the Examiner maintains that these claims fail to state or teach one of ordinary skill in the art how to include a layer of confidentiality protection to an aggregate dataset.

With this Amendment, Applicants have amended claims 23 and 32 substituting the phrase “a layer of confidentiality protection” with the phrase “a number of summary demographic variables” in each claim. Antecedent support for this amendment can be found, for example, on page 7, lines 16-22 of the Application, which provides:

To protect the identity of the individual residents or households within a predefined geographic region, the demographic data for each household is preferably rolled together with at least one, but preferably two other households, and more preferably three to four neighboring households. This creates a number of geo-demographic cluster data sets, shown generally at 30. In a preferred embodiment, *a number of summary demographic variables* are created for each geo-demographic cluster data set.

(emphasis added). Support for these claim amendments can also be found at other locations within the Application. *See e.g.* Application at page 3, lines 15-27; page 12, lines 21-29; Appendix; claim 3.

Applicants respectfully assert that amended claims 23 and 32 fully satisfy the enablement requirement under 35 U.S.C. § 112, first paragraph, and do not introduce any new matter into the Application. Since these claim amendments are not made in response to a rejection based on prior art, and thus would not require additional searching of the prior art by the Examiner, Applicants submit that these claim amendments should be entered and considered in the next action.

35 U.S.C. § 112, ¶ 2 Rejections

In paragraph 8 of the Office Action, the Examiner rejected claims 28-33 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In particular, the Examiner states that claims 28-33 do not clearly define the phrase “system”, stating that such term could contain a plurality of elements and without further definition is vague and indefinite.

With this Amendment, Applicants have amended independent claim 28 to recite that the system is a “computer-assisted system”, thus overcoming the Examiner’s rejection of claims 28-33 under 35 U.S.C. § 112, second paragraph. Applicants note that that the preamble to claim 28 is now similar to that recited in independent claim 34, which was not rejected by the Examiner under 35 U.S.C. § 112, second paragraph. Applicants respectfully submit that such claim amendment does not impose any

additional burden on the Examiner to search the prior art, and thus should be entered and considered in the next action.

35 U.S.C. § 102(b) Rejections

In paragraph 10 of the Office Action, the Examiner rejected claims 1-8, 10-12, 22, 28-31 and 33-34 under 35 U.S.C. § 102(b) as being anticipated by Environmental Systems Research Institute Inc.'s (ESRI) ArcView GIS suite disclosed in (I) ArcView Business Analyst White Paper (Jan. 2000) (Reference A); (II) ArcView GIS Brochure (Mar. 2000) (Reference B); and (III) ESRI.com web pages (Feb.-Mar. 2000) (Reference C).

Applicants respectfully assert that claims 1-8, 10-12, 22, 28-31, and 33-34 are not anticipated by the above ESRI documents. Reference A appears to disclose a business analysis module for use in performing customer market analysis, customer prospecting, store market analysis, and store prospecting. The module is divided into a number of wizards, which lead the user through a number of separate screens for identifying and locating block groups of customers meeting specific input criteria.

In one such wizard for use in "Customer Prospecting" on page 6 (see Figure 6), Reference A makes clear that customer profiles are not aggregated into household-specific demographic profiles for geographically adjacent or proximate parcels of land, but are instead aggregated into larger segments by "ZIP Code, block groups, or tracts":

With ArcView Business Analyst you can run customer profiles by geography, household information, or demographic characteristics and can segregate and display them by ZIP Code, block groups, or tracts. (Tracts or census tracts are portions of subdivisions or counties averaging about 4,000 residents per tract; block groups are subdivisions of the tracts that contain an average of 500 to 700 residents per group). As long as you know what attributes you are looking for, the wizard will do the search.

Thus, as can be seen above, the Business Analyst module takes demographic-based customer profiles and then aggregates them into relatively large segments (*e.g.* “tracts” or “block groups”) to permit customer profiling in certain market areas. In another wizard for performing “Store Market Analyses” (see page 7), data rings of between 1-5 miles in radius (or other selected size) can be drawn around a selected location or site in order to understand the demographics for that site. A report summarizing the records in the data can then be made by geography grouping the records by “ZIP Code, tracts, or even trade areas”, as discussed further on page 10 of Reference A.

The ArcView GIS Brochure (Reference B) cited by the Examiner describes the basic purpose and architecture for the ArcView GIS program, including some key features such as visualization, data integration, and spatial mapping. In describing data aggregation functionality on page 10, Reference B provides that the data can be summarized based on geographic areas such as “census tracts, states, or sales territories”:

You can find answers according to location, proximity, and intersection. As you add data to maps, find the geographic factors that drive trends and distributions. Add different data layers, and then find locations where particular characteristics coincide. Identify the places where most of your current business occurs, then find places similar to these to expand. Aggregate data geographically by summarizing it based on areas such as census tracts, states or sales territories.

Thus, similar to that described in Reference A above, Reference B appears to suggest that geographic data aggregation is performed using relatively large segments such as census tracts, states, or sales territories.

The ESRI.com web pages (Reference C) cited by the Examiner further describe other features of the ArcView GIS suite, including several modules available with the suite.

Referring first to the rejection of claims 1-8 and 10-12, Applicants respectfully assert that the ArcView GIS suite described in References A-C does not disclose each and every element of those claims. Independent claim 1 recites in full:

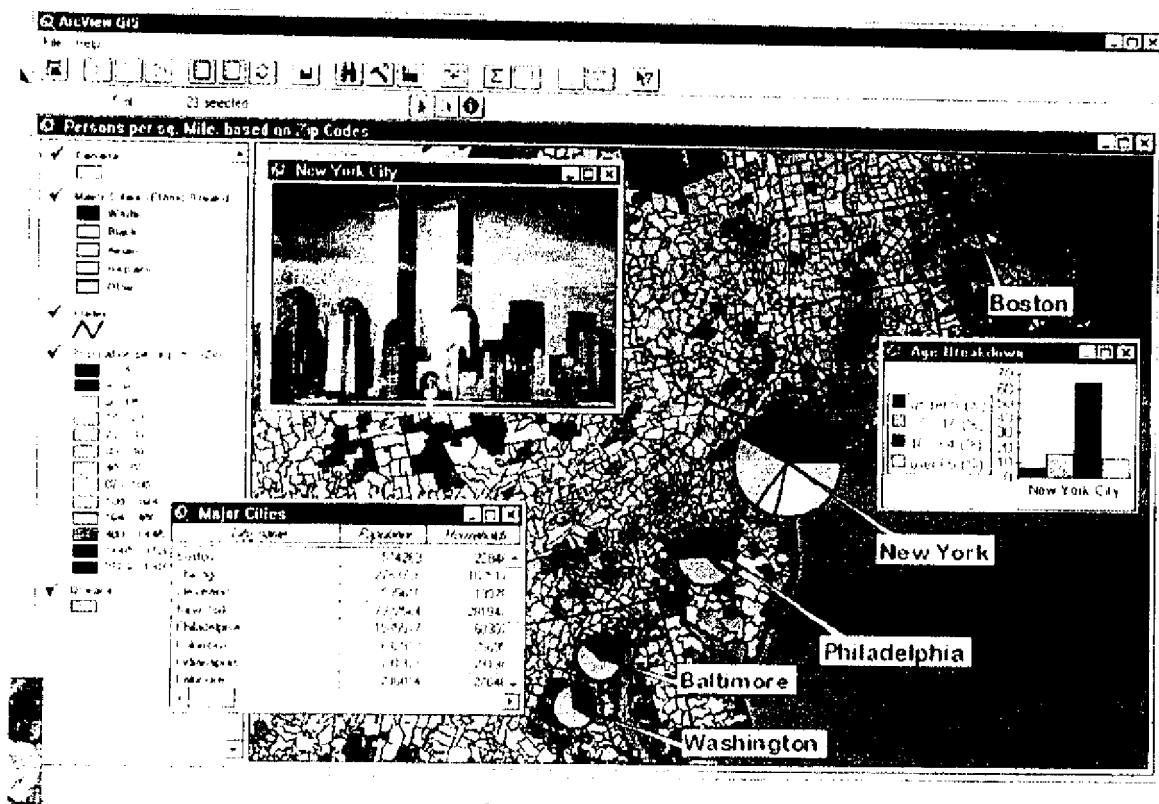
1. (Previously Amended) A method for providing demographic information for a geo-demographic cluster area within a predefined geographic region, the method comprising:
 - providing a first database, the first database having a number of data records that directly or indirectly relate to occupants in the predefined geographic region;
 - providing a second database, the second database having a number of different data records that directly or indirectly relate to occupants in the predefined geographic region;
 - associating selected data entries in the first and second databases with parcels of land;
 - generating household-specific demographic profiles for each parcel of land using the data records in the first and second databases;*
 - generating an aggregate dataset for at least two geographically adjacent or proximate parcels of land in the predefined geographic region by combining the household-specific demographic profiles for each of the at least two geographically adjacent or proximate parcels of land;* and
 - outputting selective data from the aggregate dataset to a user.

Thus, as can be seen above, claim 1 recites the novel steps of generating household-specific demographic profiles for each parcel of land using data records from first and second databases, and then generating an aggregate dataset for at least two geographically adjacent or proximate parcels of land in a predefined geographic region by combining the household-specific profiles.

Unlike the method recited in claim 1 above, the ArcView GIS suite does not aggregate household-specific demographic profiles for parcels of land, but instead aggregates such data into larger segments by “ZIP Code, block groups, or tracts”. As disclosed in Reference A at page 6, “tracts” or “census tracts” are defined as portions of subdivisions or counties averaging about 4,000 per tract” whereas “block groups” are defined as subdivisions of the tracts that contain an average of 500 to 700 residents per

group.” Nothing in these references appears to suggest aggregating such data into household-specific demographic profiles for at least two geographically adjacent or proximate parcels of land. To the contrary, the ArcView GIS suite appears to be directed towards aggregation of geographic data into larger groups or data rings that can be used to analyze data for purposes such as customer profiling or store market analysis, which is not typically accomplished at the household-specific level using information from geographically adjacent or proximate parcels of land.

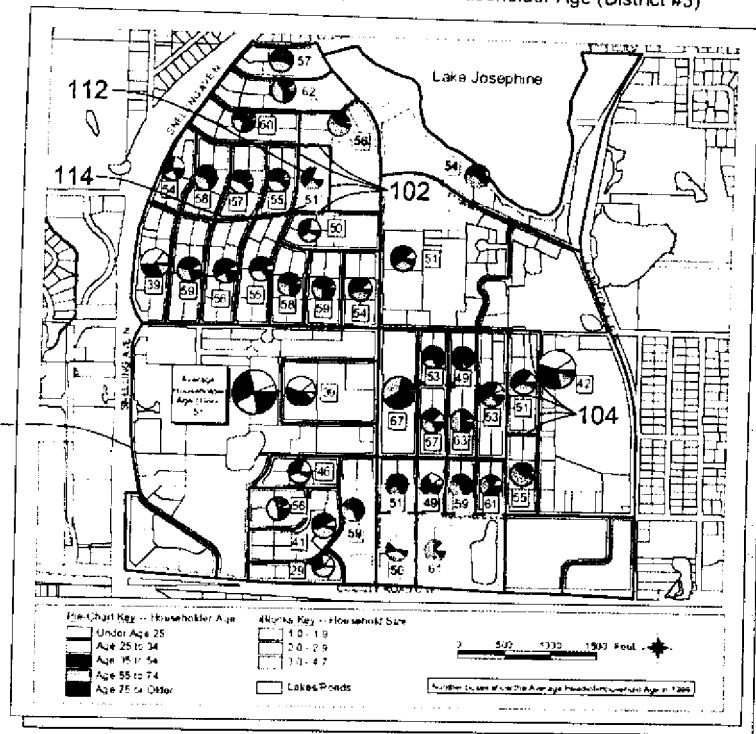
This distinction can be clearly seen by contrasting “Figure 5” of Reference B with Figure 5 of the present Application, both of which have been reproduced below:



(“Figure 5” of Reference B)

AGE AND SIZE OF HOUSEHOLD - 1999

Distribution of Households by Size and Householder Age (District #3)



Ages of Adult Head-of-Household (1999) (Block Totals)

	District #3 Total	Owner-Occupied	Renter-Occupied	Blockwise Total
* Under Age 25	90 5.1%	13 1.5%	77 8.9%	906 3.9%
* Age 25 to 34	57 3.1%	85 9.1%	272 31.3%	2,252 15.0%
* Age 35 to 44	323 18.3%	150 16.7%	173 19.9%	2,772 18.4%
* Age 45 to 54	286 16.2%	186 20.8%	100 11.5%	2,789 18.5%
* Age 55 to 64	219 12.1%	157 17.5%	56 6.5%	2,094 13.9%
* Age 65 to 74	239 13.0%	163 18.2%	67 7.7%	2,041 13.6%
* Age 75 or Older	285 16.2%	162 18.1%	123 14.2%	2,509 16.7%
Total Units	1,764 100.0%	896 100.0%	868 100.0%	15,043 100.0%

(Figure 5 of Application)

As can be clearly seen from Figure 5 of Reference B, aggregation of the geographic data using the ArcView GIS suite is accomplished on a relatively large scale by organizing such data by ZIP Code, counties, or other such subdivision, as shown. In Figure 5 of Reference B, for example, such data is organized by major city (e.g. Washington, Baltimore, etc.) and not on a household-specific level based on adjacent or proximate parcels of land. In contrast, and as can be seen from Figure 5 of the Application (above), aggregated data in the present claimed invention is organized at the household-specific level, allowing a user to view and analyze household-specific demographic profiles based

on adjacent or proximate parcels of land. In Figure 5, for example, each parcel of land located within local boundaries 102 and 104 can be used to generate household-specific demographic summaries (e.g. pie chart 112) that can be used to better analyze trends occurring at the household-specific level.

Applicants further assert that the motivation to generate such household-specific demographic profiles would not be present in the type of system described in References A-C since such data would, under some circumstances, pose a security threat due to the relatively small number of households that could be viewed by the end-user. Moreover, unlike the type of system described in References A-C, the underlying data supporting the generation of household-specific profiles would typically require greater accuracy than is usually provided by such systems, preventing their use in generating the household-specific demographic profiles.

Because the ArcView GIS suite aggregates geographical data into larger segments such as ZIP Code, tracts, or block groups, Applicants assert that the steps in claim 1 of generating household-specific demographic profiles for each parcel of land using data records from first and second databases, and then generating an aggregate dataset for at least two geographically adjacent or proximate parcels of land are not disclosed or suggested by the cited prior art. Accordingly, Applicants assert that the rejection of claim 1 under 35 U.S.C. § 102(b) is improper.

Because claim 1 is allowable, Applicants further assert that dependent claims 2-8 and 10-12 are also allowable for at least the reasons provided above and since they claim other significant limitations not suggested by the cited prior art.

Turning next to the rejection of claim 22, Applicants respectfully submit that the cited prior art does not disclose, among other novel elements, the steps of associated selected data entries with parcels of land to generate household-specific demographic profiles within a predefined geographic region, and generating an aggregate dataset for at least two geographically adjacent or proximate parcels of land, as recited therein.

In contrast, and as discussed above, the ArcView GIS suite appears to be directed towards data aggregation based on larger segments such as ZIP Code, tracts, or block groups, which would not permit the user of the program to view and analyze household-specific demographic profiles based on adjacent or proximate parcels of land. Accordingly, Applicants respectfully assert that independent claim 22 is not anticipated by the ArcView GIS suite described in the cited prior art references.

Turning finally to the rejection of claims 28-31 and 33-34, and for reasons similar to that given above with respect to method claims 1-12, Applicants respectfully assert that the ArcView GIS suite described in the cited prior art references fails to disclose each and every element of independent claims 28 and 34. Claim 28 recites in full:

28. (Currently Amended) A computer-assisted system for providing demographic information to a user for a geo-demographic cluster area within a predefined geographic region, the system comprising:

a first database having a number of data records that directly or indirectly relate to occupants in the predefined geographic region;

at least one additional database having a number of data records different from said first database and that directly or indirectly relate to occupants in the predefined geographic region;

a means for processing demographic data from the first database and the at least one additional database *and associating selected data entries with parcels of land to generate household-specific demographic profiles within the predefined geographic region*; and

wherein said processing means is adapted to generate an aggregate dataset for at least two geographically adjacent or proximate parcels of land in the predefined geographic region by combining

household-specific demographic profiles for each of the at least two geographically adjacent or proximate parcels of land.

As can be seen above, independent claim 28 recites, among other novel elements, a means for associating selected data entries with parcels of land to generate household-specific demographic profiles within a predefined geographic region. Claim 28 further recites that the processing means is adapted to generate an aggregate dataset for at least two geographically adjacent or proximate parcels of land within a predefined geographic region by combining household-specific demographic profiles for each of the at least two geographically adjacent or proximate parcels of land. Claim 34 further rejected by the Examiner also contains limitations similar to that contained in independent claim 28.

As discussed previously, the cited prior art references describing the ArcView GIS suite suggest that data aggregation is accomplished geographically using relatively large geographical segments such as ZIP Codes, tracts, or block groups. *See e.g.* Reference A, page 10; Reference B, page 10. Nothing in these references appear to suggest combining household-specific demographic profiles for at least two geographically adjacent or proximate parcels of land, as recited in independent claims 28 and 34. Accordingly, Applicants respectfully assert that claims 28 and 34 are allowable over the cited prior art.

Because claim 28 is allowable, Applicants further assert that dependent claims 29-31 and 33 are also allowable for at least the reasons provided above and since they claim other significant limitations not suggested by the cited prior art.

35 U.S.C. § 103(a) Rejections

In paragraph 12 of the Office Action, the Examiner rejected claims 9, 13, 15-21, 23-27, and 32 under 35 U.S.C. § 103(a) as being unpatentable over Environmental

System Research Institutes Inc.'s (ESRI) suite of ArcView GIS systems (References A through C) as applied to claims 1-8, 10-12, 22, 28-31, and 33-34 above, and further in view of *Johnson et al.*, "Protecting Personal Privacy in Using Geographic Information Systems" (1994).

For reasons similar to that discussed above, Applicants respectfully assert that claims 9, 13, 15-21, 23-27, and 32 are not obvious since the cited prior art references fail to disclose or suggest each and every element of those claims. As discussed previously, the ArcView GIS suite described in References A through C fails to disclose each and every limitation of independent claims 1, 22, and 28. The *Johnson et al.* reference, when combined with References A through C, similarly fail to disclose each and every element of those claims. Accordingly, Applicants respectfully assert that dependent claims 9, 13, 15-21, 23-27, and 32 are not obvious in view of the cited prior art.

With respect to the obviousness rejection of claims 15 and 32, Applicants further note that it would not have been obvious to prevent users from accessing household-specific demographic profiles since the cited prior art does not disclose or suggest aggregating such data based on at least two geographically adjacent or proximate parcels of land within a predefined geographic region, as recited in claim 1 and 28. Without such data being generated, Applicants assert that there would have been no motivation or suggestion to prevent access of such information to a user. Similarly, with respect to the obviousness rejection of claim 23, Applicants assert that since the cited prior art does not disclose or suggest generating an aggregate dataset for at least two households in a predefined geographic region by combining household-specific demographic profiles for

each household, there would have been no motivation or suggestion to prevent access of such information to a user, as recited in that claim.

In addition, with respect to the obviousness rejection of claims 24-27, Applicants respectfully traverse the Examiner's statement that the specific number/ranges of households recited in these claims are "only found in the non-functional descriptive material and are not functionally involved in the steps recited nor do they alter the recited structural elements." Claims 24-27 recite specific numbers of households (*e.g.* 2 to 100) within the aggregate dataset generated, which Applicants submit affects the step of outputting selective data from the aggregate dataset to a user, as recited in independent claim 23. For larger numbers of households greater than that recited in claims 24-27, for example, the level of security needed to protect individual household's privacy would be considerably less than that required by the ranges recited in claims 24-27, affecting the summary demographic variables outputted as part of the aggregate dataset. The range limitations contained in claims 24-27 thus act to further distinguish the claimed invention over the prior art.

Applicants also note that the definition of "tract" and "block groups" provided in References A through C appear to teach away from the number ranges recited in claims 24-27, further countering the Examiner's obviousness rejection of these claims. As discussed above, Reference A (ArcView Business Analyst White Paper) states that customer profiles can be segregated and displayed by "ZIP Code, block groups, or tracts", defining tracts as portions of subdivisions or counties averaging about 4,000 residents per tract, and defining block groups containing an average of 500 to 700 residents per group. *See Reference A* at page 6.

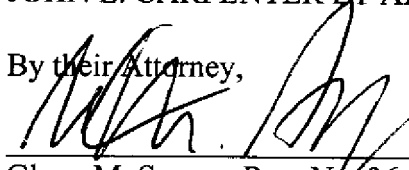
Reexamination and reconsideration are respectfully requested. It is submitted that all pending claims are currently in condition for allowance. Issuance of a Notice of Allowance in due course is anticipated. If a telephone conference might be of assistance, please contact the undersigned attorney at 612-677-9050.

Respectfully submitted,

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By their Attorney,

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